

REMARKS

Claims 13-27 are currently pending in this application.

Claims 13, 15-19 and 22-27 have been rejected under 35 U.S.C. §102(b) as being “unpatentable” over Passmann et al (“Wireless Vehicle-to-Vehicle Warning System”, SAE Document No. 2000-01-1307, March 2000). It is Applicants’ belief, however, in view of the explicit reference to §102(b), and in view of the use of the word “anticipated” at the end of the second paragraph on page 4 of the Office Action, that the cited Claims 13, 15-19 and 22-27 have been rejected as anticipated by Passmann et al within the meaning of 35 U.S.C. §102(b). Further, while Claim 20 is not mentioned in the express rejection of Claims 13, 15-19 and 22-27 under §102(b), it is in fact mentioned in the last paragraph on page 2 of the Office Action. Accordingly, for the purpose of this response, Applicants have assumed that Claim 20 is included in the §102 rejection.

In addition, Claims 14 and 21 have been rejected under 35 U.S.C. §103(a) as unpatentable over Passmann et al in view of Schuessler (International Patent Document WO 01/61668 A1, and its U.S. equivalent Published Patent Application No. 2003/0090392).

However, for the reasons set forth hereinafter, Applicants respectfully submit that all claims of record in this application distinguish over the cited references, whether considered separately or in combination.

The present invention is directed to a radio based warning system for issuing hazard warning information to the driver of a receiving vehicle having a data receiver which receives hazard data from a data transmitter of at least one other vehicle, and evaluates the received data. In particular, as recited in Claim 13, the received data include information regarding position, speed and direction of travel of the at least one vehicle which transmitted the information. Based on the received data from the at least one other vehicle, and on information regarding the position, speed and direction of travel of the receiving vehicle, a relevance measure is determined in the receiving vehicle, which relates to whether the at least one other vehicle is located on a section of road that lies ahead of the receiving vehicle.

Finally, Claim 13 further specifies that a chronological profile of the relevance measure is determined by repeatedly determining the relevance measure. Thus, as noted, for example, in the specification in paragraphs [0013] and [0032], the generation of such a chronological profile makes possible more reliable detection of relevant locations of hazards, and also makes it possible, for example, to determine which warning messages are correct and which are

incorrect. The latter feature of the invention thereby fosters enhanced confidence in the system by an operator of the vehicle by effectively cancelling a warning which is incorrect. Therefore, the operator will have greater confidence that any warning which is received is in fact correct.

The Passmann et al reference is discussed briefly in the specification of the present application at paragraph [0008]. It describes a warning system based on the idea of transmitting safety related information from one vehicle to surrounding vehicles by direct wireless communication. (See, for example, page 149, Abstract, lines 3-5.) To this extent, it is similar to the present invention. However, the process by which the warning message is developed, and analyzed to determine its relevance differs from that of the present invention.

As a preliminary matter, it is noteworthy that the Passmann et al disclosure does not specify the actual content of the alert message which is generated. While it is arguably inferred from Figure 5 that the message includes heading information and vehicle location, nothing in Passmann et al contains any mention of the speed of the transmitting vehicle as a component of the alert message.

More importantly, however, as noted previously, the final paragraph of Claim 13 specifies that a "chronological profile" of the relevance measure is determined by repeatedly determining the relevance measure. As noted

previously, this feature of the invention, which is not taught or suggested in Passmann et al it makes possible more reliable detection of relevant locations of hazards, and in particular, it can be used to detect incorrect warnings or “false alarms”. (See paragraphs [0013], [0014], and [0032].)

With regard to the latter feature of the invention, the Office Action states that the DSP unit (presumably of the receiving vehicle) continuously determines whether the received alert message is relevant or not relevant. However, Applicants respectfully submit that this feature is not taught or suggested in Passmann et al. In particular, it is noted that under the heading “Signal Generation”, the DSP unit continuously processes signals provided by vehicle systems or sensors “to detect and classify critical conditions”. The text, however, contains nothing which suggests that the receiving vehicle generates a chronological profile of the relevance measure, such as recited in Claim 13. Rather, once a determination of “relevant” or “not relevant” is made, an appropriate message is conveyed to the operator of the vehicle, as noted, for example, in the bottom portion of the last paragraph on page 151.

Moreover, Claim 15 of the present application further specifies that, as noted previously “incorrect warnings are detected based on the chronological profile of the relevance measure”. Accordingly, Claim 15 further distinguishes over Passmann et al for this additional reason as well.

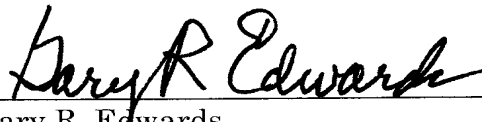
The Schuessler et al reference has been cited only in respect of Claims 14 and 21 as teaching a warning device in which a hazard warning signal is stored and displayed to the driver. Moreover, in Schuessler et al, processing necessary for determination of the relevance for the warning signal is performed by the transmitting vehicle itself, which determines a "warning zone around the current position of the transmitting vehicle", which information is sent to other vehicles, together with additional information. Thus, as shown in Figure 3, upon receipt of a message, the receiving vehicle first determines whether it is within the warning zone calculated by the transmitting vehicle.

More importantly, however, like Passmann et al, the Schuessler et al reference contains no teaching or suggestion of the determination of a chronological profile of a relevance measure by repeatedly determining the relevance measure, such that the chronological profile may be used, as noted in the specification of the present application, to detect and withdraw incorrect warning messages.

In light of the foregoing remarks, this application should be in condition for allowance, and early passage of this case to issue is respectfully requested. If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323, Docket No. 095309.55979US.

Respectfully submitted,

A handwritten signature in black ink, reading "Gary R. Edwards". The signature is written in a cursive style with a horizontal line underneath the name.

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